

November 29, 2007

Marcine Elvin Crane, MS, CPA Chief, Office of Health Plan Administration 400 Q Street – 2<sup>nd</sup> Floor Sacramento, CA 95814

Subject: Actuarial Valuation of the CalPERS Long Term Care Program as of June 30, 2007 - Updated Using Policies Inforce as of September 30, 2007

Dear Mr. Crane:

Per the request of CalPERS LTC Program staff, we have updated our annual valuation as of June 30, 2007 using data from policies inforce as of September 30, 2007. The purpose of this letter and attachments is to briefly present the results of this update.

#### Background

The annual valuation as of June 30, 2007 includes "base case" scenario results both before and after the projected impact of rate actions recently adopted by the Board. The results of these "base case" scenarios referenced above are as follows:

- Before Rate Increase: Projected deficit of approximately 42.9% of the present value of future premiums or \$822.6 million.
- After Rate Increase: Projected deficit of approximately 5.7% of the present value of future premiums or \$147.7 million.

A number of assumptions had to be made in order to develop the "After Rate Increase" scenario. The primary purpose of updating the annual valuation using inforce data as of September 30, 2007 was to substitute actual data/information for many of the assumptions used.

#### Methodology

We utilized the 2007 annual valuation assumptions and process with the following exceptions:

- We substituted inforce data as of September 30<sup>th</sup> for the corresponding inforce data as of June 30<sup>th</sup>; and,
- For each of the policies on claim as of June 30<sup>th</sup> that lapsed on or before September 30<sup>th</sup>, we transferred their claim reserve into the corresponding incurred-but-not-reported liability. We wanted to make sure that no valuation claim dollars were "lost" through the updating process.

Updating the valuation in this manner allowed us to more accurately reflect the impact of the recently implemented rate actions. For example:



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- Instead of making one or more assumptions with respect to shock lapses (i.e., lapses directly resulting from the rate increase), we could reflect the impact of the actual lapses occurring between June 30<sup>th</sup> and September 30<sup>th</sup>.
- Instead of making one or more assumptions with respect to benefit changes/migration, we could reflect the impact of actual benefit changes/migration occurring between June 30<sup>th</sup> and September 30<sup>th</sup>.
- Instead of making one of more assumptions with respect to the ultimate impact on rate-levels of the implemented rate increase, we could reflect the impact of actual inforce rate levels as of September 30<sup>th</sup> (i.e., three months after nearly all of the rate increases were implemented).

The results of this update are summarized in the next section of this letter.

### Results

The corresponding updated deficit given the assumptions and methodology described above is approximately 1.5% of the present value of future premiums or \$38.0 million.

For comparison purposes, as indicated earlier in this letter, the "base case", "after rate increase" deficit from the annual valuation was approximately 5.7% of the present value of future premiums or \$147.7 million.

Given the timeframe for this project, we did not perform a detailed analysis of the source(s) of the valuation difference summarized above; however, the following are changes in the inforce data as of September 30<sup>th</sup> as compared to June 30<sup>th</sup> that would have led to an improved valuation result (i.e., reduced deficit):

- Reduced aggregate inforce policy count;
- Reduced proportion of inforce with lifetime benefit periods (i.e., unlimited benefits);
- Reduced proportion of inforce at older issue-ages;
- Reduced proportion of inforce that were originally subject to more liberal underwriting standards; and,
- Increased proportion of inforce in plans that are more adequately rated for the benefits provided.

Please see Attachment F. It has been revised from the Attachment F included in the annual valuation report to include corresponding data from the September 30<sup>th</sup> inforce and percentage change information.

## **Caveats and Limitations**

All caveats and limitations applicable to the annual valuation and report would be applicable to this valuation update and report as well.

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## Conclusion

Please feel free to contact me directly to discuss anything presented in this report at (317)575-7672 or via e-mail at <a href="kvolkmar@uhasinc.com">kvolkmar@uhasinc.com</a>.

Sincerely,

Karl G. Volkmar, FSA, MAAA, FCA Principal & Consulting Actuary

#### Attachment F - Revised

# CalPERS LTC Program Distributions of Business Inforce as of 6/30/07 and 9/30/07

#### By Benefit Period and Elimination Period

Benefit <u>Period</u>	Elimination <u>Period</u>	6/30/2007 Count	9/30/2007 <u>Count</u>	9/30/2007 / 6/30/2007
1 Year	30 Day	2,441	2,408	-1.4%
2 Year	30 Day	4,524	4,494	-0.7%
3 Year	90 Day	30,203	33,743	11.7%
6 Year	90 Day	1,730	8,459	389.0%
Lifetime	90 Day	132,486	120,791	-8.8%
Total		171,384	169,895	-0.9%

## By Issue-Age Band and Gender

	6/30/2007		9/30/20		9/30/2007 /	
Issue-Age Band	<u>Females</u>	Males	<u>Females</u>	<u>Males</u>	Females	Males
27	580	321	560	314	-3.4%	-2.2%
36	5,085	3,104	5,029	3,072	-1.1%	-1.0%
42	6,706	3,746	6,644	3,710	-0.9%	-1.0%
47	12,318	6,955	12,206	6,874	-0.9%	-1.2%
52	18,358	11,196	18,307	11,095	-0.3%	-0.9%
57	20,137	13,667	20,002	13,591	-0.7%	-0.6%
62	16,875	13,277	16,745	13,163	-0.8%	-0.9%
67	11,649	9,296	11,554	9,213	-0.8%	-0.9%
72	7,176	4,846	7,096	4,764	-1.1%	-1.7%
77	3,048	1,746	2,993	1,708	-1.8%	-2.2%
81	775	358	755	345	-2.6%	-3.6%
86	115	39	108	37	-6.1%	-5.1%
91	6	4	6	3	0.0%	-25.0%
<u>98</u>	1	-	1	-	0.0%	
Total	102,829	68,555	102,006	67,889	-0.8%	-1.0%
Grand Total		171,384		169,895		-0.9%

#### By Attained Age and Gender

	-,					
	6/30/2007		9/30/200		9/30/2007 /	
Attained Age	<u>Females</u>	Males	Females	<u>Males</u>	Females	Males
27	8	5	8	5	0.0%	0.0%
28	15	6	15	6	0.0%	0.0%
29	27	15	26	15	-3.7%	0.0%
30	29	16	27	14	-6.9%	-12.5%
31	77	48	72	46	-6.5%	-4.2%
32	71	41	67	41	-5.6%	0.0%
33	78	49	76	48	-2.6%	-2.0%
34	63	32	62	32	-1.6%	0.0%
35	49	25	47	25	-4.1%	0.0%
36	96	69	94	68	-2.1%	-1.4%
37	146	95	144	95	-1.4%	0.0%
38	219	119	212	114	-3.2%	-4.2%
39	238	164	234	163	-1.7%	-0.6%
40	488	319	480	309	-1.6%	-3.1%
41	551	354	543	350	-1.5%	-1.1%
42	599	357	595	354	-0.7%	-0.8%
43	525	336	518	333	-1.3%	-0.9%
44	576	367	571	364	-0.9%	-0.8%
45	917	520	907	513	-1.1%	-1.3%
46	1,398	800	1,378	790	-1.4%	-1.3%
47	1,298	756	1,285	746	-1.0%	-1.3%
48	1,079	667	1,064	660	-1.4%	-1.0%
49	912	486	899	482	-1.4%	-0.8%
50	1,066	603	1,055	595	-1.0%	-1.3%
51	2,014	1,085	1,990	1,070	-1.2%	-1.4%
52	2,432	1,332	2,408	1,317	-1.0%	-1.1%
53	2,370	1,285	2,346	1,269	-1.0%	-1.2%
54	1,896	1,267	1,881	1,053	-0.8%	-1.3%
55	1,868	1,083	1,855	1,033	-0.7%	-1.1%
56	3,162	1,945	3,128	1,913	-1.1%	-1.6%
57	4,128	2,524	4,085	2,496	-1.0%	-1.1%
58	3,900	2,524	3,968	2,490	1.7%	-0.7%
59	2,809	1,830	2,789	1,811	-0.7%	-1.0%
60	2,549	1,643	2,535	1,626	-0.5%	-1.0%
		2,850	4,471	2,825	-0.8%	-0.9%
61	4,507 4,476	2,919	4,432	2,820	-1.0%	-1.0%
62				2,798	-0.7%	1.5%
63	4,203 2,589	2,758 1,854	4,174 2,573	1,841	-0.6%	-0.7%
64	2,526	1,824	2,510	1,805	-0.6%	-1.0%
65			3,763	2,649	-0.4%	-0.9%
66	3,780	2,674			-0.4%	-0.9%
67	4,357	2,894	4,338	2,866		-0.9%
68	3,966	2,702	3,952	2,678	-0.4%	-0.9%
69	1,744	1,438	1,728	1,429	-0.9%	
70	1,768	1,450	1,758	1,438	-0.6%	-0.8%
71	2,942	2,294	2,922	2,268	-0.7%	-1.1%
72	3,510	2,829	3,484	2,812	-0.7%	-0.6%
73	4,265	3,009	4,232	2,998	-0.8%	-0.4%
74	1,043	927	1,027	914	-1.5%	-1.4%
75	1,200	1,006	1,192	997	-0.7%	-0.9%
76	2,150	1,649	2,133	1,635	-0.8%	-0.8%
77	2,576	1,969	2,557	1,951	-0.7%	-0.9%
78	3,710	2,828	3,685	2,807	-0.7%	-0.7%
79	591	409	589	403	-0.3%	-1.5%
80	817	491	803	480	-1.7%	-2.2%

#### Attachment F - Revised

## CalPERS LTC Program Distributions of Business Inforce as of 6/30/07 and 9/30/07

Grand Total		171,384		169,895		-0.9%
Total	102,829	68,555	102,006	67,889	-0.8%	-1.0%
104	11_		1	•	0.0%	
101	1	-	1	-	0.0%	
100	1		1	-	0.0%	
99	2	-	2	-	0.0%	
97	13	3	13	2	0.0%	-33.3%
96	14	8	13	8	-7.1%	0.0%
95	14	11	13	10	-7.1%	-9.1%
94	13	3	10	3	-23.1%	0.0%
93	14	5	13	5	-7.1%	0.0%
92	135	64	134	62	-0.7%	-3.1%
91	151	50	142	47	-6.0%	-6.0%
90	100	62	98	59	-2.0%	-4.8%
89	124	61	122	58	-1.6%	-4.9%
88	708	435	692	424	-2.3%	-2.5%
87	600	377	586	368	-2.3%	-2.4%
86	544	334	534	328	-1.8%	-1.8%
85	378	195	372	192	-1.6%	-1.5%
84	331	188	322	185	-2.7%	-1.6%
83	2,303	1,599	2,272	1,567	-1.3%	-2.0%
82	1,629	1,049	1,608	1,034	-1.3%	-1.4%
81	1,380	876	1,370	859	-0.7%	-1.9%

#### By Plan Type

	6/30/2007	9/30/2007	9/30/2007 /
<u>Plan Type</u>	<u>Count</u>	Count	6/30/2007
Partnership (Comprehensive)	6,967	6,907	-0.9%
Comprehensive	128,015	126,939	-0.8%
Facilities Only	36,402	36,049	-1.0%
Total	171,384	169,895	-0.9%

#### By Inflation

Inflation	6/30/2007 Count	9/30/2007 Count	9/30/2007 / 6/30/2007
No Inflation	48,401	47,925	-1.0%
Inflation	122,983	121,970	-0.8%
Total	171.384	169.895	-0.9%

## By Marital Status

		6/30/2007	9/30/2007	9/30/2007 /
Marital Status	<u>Gender</u>	Count	Count	6/30/2007
Married	F	63,643	63,073	-0.9%
Married	M	55,104	54,535	-1.0%
Divorced	F	14,215	14,067	-1.0%
Divorced	M	4,098	4,053	-1.1%
Single	F	11,780	11,666	-1.0%
Single	M	5,814	5,755	-1.0%
Widowed	F	12,479	12,496	0.1%
Widowed	M	2,579	2,596	0.7%
Unknown	F	705	697	-1.1%
Unknown	M	953	943	-1.0%
Separated	F	7	7	0.0%
Separated	M	7	7	0.0%
Total		171,384	169,895	-0.9%

#### By Premium Mode

	6/30/2007	9/30/2007	9/30/2007 /
Premium Mode	Count	Count	6/30/2007
Monthly	129,634	128,583	-0.8%
Quarterly	32,121	31,847	-0.9%
Semi-Annually	5,535	5,473	-1.1%
Annually	4,094	3,992	-2.5%
Total	171,384	169,895	-0.9%

## By Underwriting Type

Underwriting Type	6/30/2007 Count	9/30/2007 Count	9/30/2007 / 6/30/2007
LF	109,243	111,573	2.1%
MGI	33,775	31,829	-5.8%
SF	28,366	26,493	-6.6%
Total	171,384	169,895	-0.9%

### By Product Series

	6/30/2007	9/30/2007	9/30/2007 /
Product Series	Count	Count	6/30/2007
LTC 1	154,815	143,936	-7.0%
LTC 2	11,411	10,343	-9.4%
LTC 3	5,158	15,616	202.8%
Total	171,384	169,895	-0.9%